

## **RETAIL TRADE INDEX**

### **Methodological note**

The Retail Trade Index (ICIm) of the Basque Country is a quarterly short-term indicator, the objective of which is to measure the evolution of sales and employed personnel in the retail trade sector, as well as its corresponding subsectors, in the Basque Country.

Given that the population under study (establishments whose main activity is included in division 47 of the NACE Rev. 2 or CNAE 2009) belongs to the trade sector, the Retail Trade Index is included within the Trade Index (IC) of the Basque Country. Nevertheless, due mainly to the importance of the retail trade sector both directly and indirectly, as it is an indicator of the evolution of private consumption and the economy as a whole, the Retail Trade Index is disseminated individually with a greater level of disaggregation than the rest of the subsectors included in the trade sector. This is possible due to a more intense sampling of the population included in division 47 than of the population included in the rest of the trade sector divisions.

In 2023, the reference period for the ICIm was updated and 2021 became the new base year for the index. The process of changing the base year entailed a thorough revision of the methods for validating and allocating the data received, a refinement of the population under study, a renewal of the sample and a more elaborate formulation of indices. This has led to improved measurements for the subject of the study throughout the entire period analysed.

In order to prevent a break in the series, the new series with the reference year 2021 have been linked to the previous series with the reference year 2015; this has made it possible to track the quarterly estimates of the index from the first quarter of 2010 onwards. The series were linked by applying the link coefficients obtained from the 2021 study to both bases.

## 1. Scope of application

### 1.1 Population coverage

The population under study is comprised of establishments with activity in the Basque Country included in division 47 of the NACE Rev. 2 (hereinafter CNAE 2009), i.e. *Retail trade, except of motor vehicles and motorcycles*.

For the services sector as a whole, including retail trade services, Eustat has developed its own sectorisation based on the CNAE 2009 in order to obtain results that are comparable at European level, whilst also allowing for the inclusion of characteristics specific to the Basque Country.

The sectors included in retail trade and therefore studied in the Retail Trade Index are:

- **Food**
  - Retail trade in establishments specialised in food, beverages and tobacco.
  - Retail trade in non-specialised establishments with food, beverages and tobacco predominating.
- **Other**
  - Retail trade in establishments specialised in personal goods.
  - Retail trade in establishments specialised in household goods.
  - Retail trade in establishments specialised in other consumer goods.
  - Retail trade in specialised establishments with other products predominating.
- **Automotive fuel**

### 1.2. Geographic coverage

The Autonomous Region of the Basque Country and its provinces.

### **1.3. Timeframe**

The reference period is the calendar quarter.

## **2. Statistical unit**

The statistical unit used is the company whose main economic activity is any of those included within the population coverage with activity in the reference period in the Basque Country and its provinces, even when its head offices or management offices are located elsewhere.

## **3. Concepts and definitions**

### **Definition of variables**

The variables under study in the Retail Trade Index are as follows:

#### **a. Income from sales.**

“Income from sales” is defined as the total turnover of the company in the Basque Country and its provinces. It comprises the amounts invoiced by the company for the sales of goods purchased for resale in the same conditions as they were received. It includes packaging and transport costs and sales of by-products, deducting discounts on sales for prompt payment, sales returns or the value of returned packaging, as well as volume sales discounts.

They are entered in the accounts with the taxes incurred by the goods and services with the exception of VAT charged to the customer.

It does not include the subsidies received from public institutions or the European Union, financial income, or other operational revenue, such as subventions, sales of shares and fixed assets, income from interests, dividends and patents, renting out company property, production units and machinery. Neither does it include income from staff amenities (canteens, etc.) or the supply of goods and services within the unit of observation.

#### **b. Employed Personnel.**

“Employed Personnel” is defined as the average number of people who work in establishments belonging to the company whose main activity is retail trade within the relevant geographic area during the month in question.

It is the sum of the number of salaried employees and the number of self-employed personnel that work for the company. It includes both salaried personnel and self-employed personnel. Thus, “Employed Personnel” is taken to mean those who are remunerated for their work, regardless of the type of contractual relationship they have with the company (permanent, casual, full time or part time), as well as the sole owners or co-owners of the statistical unit in which they are working. It also includes family workers and workers who work outside the statistical unit, but who belong to and are paid by that unit.

## **4. Sampling plan and sample design**

### **4.1 Survey frame**

The population framework for the Retail Trade Index is Eustat’s Directory of Economic Activities (DIRAE), which contains information on the main economic activity and the number of people employed by the company and its establishments operating in the Basque Country.

### **4.2 Sample composition**

An exhaustive sampling is carried out of all establishments with 50 or more employees in the Basque Country and of companies with between 10 and 50 employees with establishments in the three provinces. For other companies, stratified random sampling is applied, using the province, employment stratum and economic activity (4-digit class of the CNAE-2009) as stratification variables.

The design and size of the sample makes it possible to obtain representative indices for the Basque Country according to the sectorisation established in section 1. In the case of the provinces, the indices are representative for the *General Index*, *Food*, *Other products* and *Automotive fuel*, as well for the *General Index excluding service stations*.

The sample is continuously adjusted in line with the changes that occur in the population under study, by conducting a study of new hires and terminations in the companies and establishments that are likely to form part of said population. As a result, changes in the population framework are detected and the survey burden is limited to the retail trade companies selected in the sample.

## 5. Reference year

The base year of the Retail Trade Index is 2021, which means that the weightings used for the aggregation of the indices are those obtained from structural economic information referring to the year 2021.

## 6. Calculation method

### 6.1. Income from sales at constant prices

The “Income from sales” data provided by respondents are valued at current prices. The actual “Income from sales” data (i.e. the income from sales at quarterly constant prices of the respondents) are obtained by applying the evolution of prices in the Basque Country, in comparison to 2021, in the various ECOICOP (European Classification of Individual Consumption by Purpose) groups, subgroups, items and special sales-related groups.

### 6.2 Elementary indices by province

The elementary indices are calculated at the CNAE-2009 class level (4 digits) for each province for the variable “Income from sales” (at current and constant prices) and for “Employed Personnel”.

1. In 2021, the elementary index of sales (current and constant) and employment for each province and CNAE-2009 class is calculated for each quarter (t) as:

$$IX_t = \frac{\sum X_t}{\bar{X}_{2021}} 100$$

where  $\bar{X}_{2021}$  is the average of the variable  $X$  in the reference year 2021 and  $X_t$  is the value of the variable for all establishments in the province during quarter t of the reference year 2021.

2. From the first quarter of 2021 onwards, the elementary index of sales (current and constant) and employment for each province and CNAE-2009 class is calculated for each quarter (t) as:

$$IX_t = IX_{t-1} \frac{\sum X_t}{\sum X_{t-1}}$$

where  $X_{t-1}$  and  $X_t$  are measured in the companies that make up the sample both in quarter t and t-1.

### 6.3 Composite indices by Province

For each province, the aggregations of the CNAE-2009 classes up to the final aggregation of the Retail Trade Index are obtained as a linear combination of the indices of the sectorisation immediately below (greater desegregation), using, in each case, the structural weighting corresponding to the reference year 2021 as a whole.

### 6.4 Elementary and composite indices for the Basque Country as a whole

The elementary (CNAE-2009 class) and composite (aggregations of the CNAE-2009 classes) indices for the Basque Country as a whole are obtained as a linear combination of the elementary and composite indices for the provinces, using the structural weighting corresponding to the base year 2021.

## 7. Correction and deseasonalisation of indices

All of the series of indices published in the Retail Trade Index are adjusted for calendar effects and deseasonalised, in accordance with the recommendations provided by the European Union in the *ESS Guidelines on Seasonal Adjustment*.

By adjusting the series for calendar effects, a full comparison can be made between the same quarters of different years. Moreover, by deseasonalising and adjusting the series for calendar effects, it is possible to compare any two quarters.

On the official recommendation of Eurostat, Eustat uses the JDemetra+ program (version 2.2.1).

Correction and deseasonalisation are performed directly, series by series, for all the indices published at provincial level and the more disaggregated indices that are only published at the Basque Country level.

In contrast, the correction and deseasonalisation of the more aggregated indices at Basque Country level are obtained indirectly as a linear combination of the series at provincial level, applying the weightings of the base year 2021. The indirect method ensures consistency among the indices for the provinces and the Basque Country as a whole.